

Amendments to the Claims

Please cancel Claim 11. Please amend Claims 1-2, 10, 12, 17 and 20-22. Please add new Claims 23-32. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (currently amended) A method for promoting cardiac tissue repair comprising administering to the cardiac tissue a therapeutically effective amount of an angiogenic thrombin derivative peptide, wherein said peptide has angiogenic activity and comprises a thrombin receptor binding domain and a serine esterase conserved sequence.
2. (currently amended) The method according to Claim 1 wherein said peptide comprises a thrombin receptor binding domain having the sequence Arg-Gly-Asp-Ala (SEQ ID NO. 1); ~~and a serine esterase conserved sequence.~~
3. (original) The method of Claim 2 wherein the serine esterase conserved sequence comprises Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 2).
4. (original) The method of Claim 2 wherein the thrombin derivative peptide comprises the amino acid sequence: Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 3).
5. (original) The method of Claim 1 wherein the thrombin derivative peptide consists of the amino acid sequence Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 4).
6. (original) The method of Claim 1 wherein the peptide is administered during or following cardiac surgery.

7. (original) The method of Claim 2 wherein the peptide is administered by injection into the cardiac tissue.
8. (original) The method of Claim 2 wherein a sustained release formulation comprising the angiogenic thrombin derivative peptide is administered to the cardiac tissue.
9. (original) The method of Claim 8 wherein the sustained release formulation is a polylactic acid/polyglycolic acid microparticles comprising the angiogenic thrombin derivative peptide.
10. (currently amended) A method of stimulating revascularization of cardiac tissue comprising administering to cardiac tissue a therapeutically effective amount of an angiogenic thrombin derivative peptide, wherein said peptide has angiogenic activity and comprises a thrombin receptor binding domain and a serine esterase conserved sequence.
11. (cancelled)
12. (currently amended) A method of inhibiting restenosis in a patient following balloon angioplasty, said method comprising administering to the patient a therapeutically effective amount of an angiogenic thrombin derivative peptide, wherein said peptide has angiogenic activity and comprises a thrombin receptor binding domain and a serine esterase conserved sequence.
13. (original) The method of Claim 12 wherein the peptide is coated onto a balloon angioplasty catheter.
14. (original) The method of Claim 12 wherein the angiogenic thrombin derivative peptide is administered systemically.

15. (original) The method of Claim 12 wherein the angiogenic thrombin derivative peptide is administered locally to a balloon induced damaged area of a blood vessel.
16. (original) The method of Claim 12 wherein a stent coated with the angiogenic thrombin derivative peptide is inserted into a blood vessel at a balloon induced damaged area.
17. (currently amended) The method of Claim 12 wherein said peptide comprises a thrombin receptor binding domain having the sequence Arg-Gly-Asp-Ala (SEQ ID NO. 1); ~~and a serine esterase conserved sequence~~.
18. (original) The method of Claim 17 wherein the serine esterase conserved sequence comprises Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 2).
19. (original) The method of Claim 17 wherein the thrombin derivative peptide comprises the amino acid sequence: Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 3).
20. (currently amended) The method of Claim 12 wherein the thrombin derivative peptide consists of the amino acid sequence Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val Asp-X₁-Cys-X₂-Gly-Asp-Ser-Gly-Gly-Pro-X₃-Val (SEQ ID NO. 4), wherein X₁ is either Ala or Ser; X₂ is either Glu or Gln; and X₃ is either Phe, Met, Leu, His, or Val.
21. (currently amended) A stent coated with an angiogenic thrombin derivative peptide, wherein said peptide has angiogenic activity and comprises a thrombin receptor binding domain and a serine esterase conserved sequence.
22. (currently amended) A method of inhibiting vascular occlusion in a patient, said method comprising administering to the patient a therapeutically effective amount of an

angiogenic thrombin derivative peptide, wherein said peptide has angiogenic activity and comprises a thrombin receptor binding domain and a serine esterase conserved sequence.

23. (new) The method of Claim 1, wherein the angiogenic thrombin derivative peptide comprises a C-terminal amide.

24. (new) The method of Claim 10, wherein the angiogenic thrombin derivative peptide comprises a C-terminal amide.

25. (new) The method of Claim 12, wherein the angiogenic thrombin derivative peptide comprises a C-terminal amide.

26. (new) The method of Claim 22, wherein the angiogenic thrombin derivative peptide comprises a C-terminal amide.

27. (new) The stent of Claim 21, wherein the angiogenic thrombin derivative peptide comprises a C-terminal amide.

28. (new) A method for promoting cardiac tissue repair comprising administering to the cardiac tissue a therapeutically effective amount of a C-terminus amidated peptide comprising the sequence Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 3).

29. (new) A method of stimulating revascularization of cardiac tissue comprising administering to cardiac tissue a therapeutically effective amount of a C-terminus amidated peptide comprising the sequence Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 3).

30. (new) A method of inhibiting restenosis in a patient following balloon angioplasty, said method comprising administering to the patient a therapeutically effective amount of a C-

terminus amidated peptide comprising the sequence Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 3).

31. (new) A stent coated with a C-terminus amidated peptide comprising the sequence Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 3).
32. (new) A method of inhibiting vascular occlusion in a patient, said method comprising administering to the patient a therapeutically effective amount of a C-terminus amidated peptide comprising the sequence Ala-Gly-Tyr-Lys-Pro-Asp-Glu-Gly-Lys-Arg-Gly-Asp-Ala-Cys-Glu-Gly-Asp-Ser-Gly-Gly-Pro-Phe-Val (SEQ ID NO. 3).